Horrvie (J. B.)

Fifty Operations on the Uterine Cervix for Laceration.

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## FIFTY OPERATIONS ON THE UTERINE CERVIX FOR LACERATION.

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This condition is one which is often overlooked, and, even when diagnosticated, is frequently regarded as a state which requires no attention further than local treatment. On this account the general impression seems to prevail that operation directed toward the repair of this lesion is unnecessary, and that improvement in health, as a rule, does not follow. At one time I was among those who favored the non-operative treatment, but since I have done the operation a sufficient number of times, and have been able to follow the subsequent history (in a large percentage of the cases) and notice the improvement which generally takes place in health, I regard it as one of the most serviceable and satisfactory operations within the scope of the gynæcologist.

When the uterine cervix is torn during parturition, convalescence is generally protracted, unquestionably due to the fact that a surface is exposed which refuses to heal properly, delaying the ordinary physiological process of involution. The more or less continued presence of this condition may cause innumerable reflex disturbances. It seldom if ever happens that repair will come about without special interference, and the immediate operation will necessitate too much uncertainty and too much risk to ever become popular. When a cervix is torn, as a rule the edges become everted, and the mucous membrane to a certain extent beyond the laceration, together with the lacerated surface, takes part in an inflammatory process. The influence extends almost invariably to the endometrium, setting up an endometritis. The lacerated surface usually bleeds easily and secretes copiously, together with the discharge from the interior of the uterus caused by the endometritis. Those are the cases which require attention, and those cases go on indefinitely in spite of anything which may be done



in the shape of local treatment. When one notes the condition of such a cervix before and after operation, it must be very evident that repair is exceedingly desirable. The secreting surface is got rid of, and the general inflammation of the interior of the uterus which resulted in consequence of the lesion naturally enough subsides. In instances where the trouble has been long standing it almost invariably happens that difficulty, to a greater or less extent, exists in connection with the appendages, notably salpingitis, and that is one principal reason why the pelvic distress so common in those cases takes often many months to subside after operation. The practice of insisting on absolute quiet for a length of time, so that resolution of the inflamed adjacent parts may take place, is very often an imperative necessity.

Until Emmet made his operation known, patients suffering from this injury were invariably called upon to endure all manner of routine treatment, usually with the effect of irritating the patient considerably and certainly doing no good. In dealing with cervical lacerations, I think, when the person is young and is likely to bear further children, the best operation is to remove a large portion of the cervix after the method of Schröder, or, if the patient has nearly approached the limit of the childbearing period, simply bringing the parts together according to Emmet will be sufficient, but no single operation will meet all requirements. I have had an opportunity to attend two cases of labor in which I had done an Emmet operation—in one instance eighteen months, and in the other fifteen months prior to delivery. The cervix acted in a perfectly natural way, dilated without difficulty, and labor terminated in both instances without recurrence of the former lesion. In another instance in which a patient of mine on whom I did an Emmet operation was delivered, the laceration recurred on one side. The labor, however, progressed very rapidly, and the patient scarcely had time to get to bed when the baby was born. Escape in this instance was scarcely to be expected.

This has led me to incline rather favorably toward the operation of Emmet, as it leaves the cervix in its original state more closely than any of the other operations, and, in my experience, is followed by equally brilliant results. Generally speaking, after repair of the parts considerable shrinking will take place as a natural course of events, and a cervix which seemed much elongated and hypertrophied will return to almost its original size. I think a mistake which is often made, and one which I committed myself a number of times at the outset, is the neglect to thoroughly curette the uterus prior to repair-

ing the cervix. It is very wonderful the amount of benefit which that proceeding alone will bring about in an enlarged organ which is the seat of endometrial inflammation. The subject of drainage under those circumstances is of paramount importance, and to close up a cervix without first going over the interior of the uterus with a sharp curette would certainly be a very sad neglect of duty. Repair of the lacerated parts is deferred for a time by some operators after curetting, so that the subject of drainage may have thorough attention. I think myself the result is ordinarily just as good if we go over the ground thoroughly with the sharp curette, until the application of the instrument may be heard and felt on the healthy muscular wall of the uterus, at the same time washing out the cavity carefully. The discharge subsequent to this is largely sanguineous, and will very readily escape through the cervical opening. In instances where subinvolution exists, together with diffuse endometritis, it is possible that recovery will be more perfect and rapid if a curettage is done, together with intra-uterine irrigation and intra-uterine packing of sterilized iodoform gauze, prior to repairing the laceration. It will, however, only be necessary in cases of enlarged uterus, or in prominent inflammatory lesions of annexa, to subject the patient to a second operation, as in both instances the administration of an anæsthetic is necessary.

There is no danger in doing an operation on the cervix, the only difficulty which may be encountered at the time being hæmorrhage Rapid work will of course guard against any serious loss. There is no use endeavoring to stop bleeding as we go along, as the blood comes from all parts denuded and is in the form of a very free general oozing. In paring the surfaces the most inferior parts should be taken care of first, so that the field of operation will be obscured as little as possible.

The instruments needed in this operation are a thin, narrow-bladed scalpel, a good tissue forceps, two tenaculum forceps, preferably Skene's, a uterine dilator, sharp and blunt curettes, Sims's speculum, scissors, and of course needles and needle holder. There is no instrument, so far as I know, which has been devised that will take the place of the scalpel in preparing the cervical edges for being brought together. The Wathen dilator, on account of its simplicity of construction, cleanliness, and efficiency, is perhaps to be preferred. The same may be said of the very ingenious needle holder recently devised by Dr. Williams, of the Johns Hopkins Hospital, a description of which appeared in *The Journal of Obstetrics and Diseases of Women*, New York, by Dr. Howard A. Kelly, June, 1893.

A preliminary which is usually adopted is to cut well up into the angle of the laceration with a straight scissors, and complete the denudation with the scalpel. The uterus is held in place and drawn well down by inserting into each opposing lip of the cervix (the patient being in the dorsal position) a tenaculum forceps.

In regard to the material for suturing, I have used wire, silkworm gut, and catgut, and have had good luck with all of them, but I must confess a certain lack of confidence in catgut. I have had no serious accidents from its use except in one instance where the sutures gave way on one side, giving rise to secondary hæmorrhage on the third day. This accident might have been more or less serious in private practice, but as it occurred in a hospital, the patient's life was not jeopardized in any way. In private practice I always use silkworm gut, knowing that when once introduced no accident can come about, the only objection I can see to its use being the possibility of its cutting through the tissues before union has taken place perfectly. However, if the parts are shaped properly, very little traction is necessary to hold the flaps in apposition, and that objection is consequently reduced to a minimum. The silkworm gut possesses all the properties of wire, is much easier of manipulation and less likely to break, and will create much less disturbance in its removal. Catgut, of course, possesses the advantage of becoming dissolved and consequently not necessitating removal, which is somewhat of an advantage, especially if the perinæum has been operated on at the same sitting, but its occasional weakness and premature disappearance render it more or less unreliable; besides, any agent which acts on the principle of catgut will attract septic material and may spoil a result which would otherwise have been satisfactory. I think there is no doubt but catgut may be made absolutely aseptic, but its strong absorptive properties will attract objectionable agents which may cause stitch-hole abscesses and inflammatory action in the line of union. This might occur very readily in the utero-vaginal tract, which is more or less difficult of maintaining in a rigid state of cleanliness. Silk possesses all the vices of catgut except its occasional giving way and none of its virtues.

The treatment of the patient prior to operation is the same as for other plastic operations in this neighborhood: the thorough evacuation of the bowels the day before and an enema on the morning of the operation. The vagina should be irrigated by a nurse two or three times before the operation with a sublimate solution (1 to 1,000), followed by plain water. In using a vaginal douche, two fingers should

be introduced so as to distend the channel that every part may be brought in contact with the irrigating fluid. If this precaution is not adopted, many parts of the vaginal folds will escape contact with the liquid and subsequently infect the wound. If this preliminary precaution be adopted, the tract will remain practically aseptic for two or three days and little danger of wound infection will follow. In my last half dozen cases I have packed the vagina with iodoform gauze for twenty-four hours prior to operation, and am inclined to regard it as a very safe proceeding. The bladder should be emptied just before the operation. The vagina is loosely packed with sterilized iodoform gauze, which is removed at the end of two days. No further packing is required; in fact, the less that is done subsequent to this except a plain water irrigation once each day, the better will be the result. The patient is allowed to pass urine from the commencement in a bed pan. Catheterization in a small proportion of the cases may be necessary for a day or so. Stitches are removed at the end of one week except in the case of catgut, which does not require removal. I have, however, left silkworm gut a much longer time without causing any disturbance, its non-absorptive properties rendering it very tolerant and non-irritating.

Case I.—Aged thirty-three years; married; one child when twenty-seven years of age; labor instrumental; no miscarriages; headache, backache, and general pelvic discomfort; loss of flesh; bowel and urinary disturbance absent; menses occur every two or three weeks, and flow continues seven to eight days; is decidedly neurasthenic.

Was under treatment by different physicians, who made use of local applications and supports. An Emmet's modification of an Albert Smith pessary was removed on examination. Perinæum lacerated through first degree. Vaginal heat and sensibility normal. Moisture increased. External os in axis of vagina and cervix bilaterally lacerated. Density increased. Uterus retroverted. Erosion and eversion of cervix with endometritis. Uterus movable; depth increased. Moderate thickening of tubes with tenderness.

Uterus was lifted into place by glycerin tamponade.

This routine treatment with potassium iodide was continued some time without benefit, and she was taken into the hospital and Emmet's trachelorrhaphy done. The result was all that could be desired. Silver wire was used for suturing. The pelvic distress, however, did not clear up as rapidly as was hoped for, and she contracted the idea that an oophorectomy should be done, which I refused. She

went to New York and saw Dr. T. A. Emmet, who advised her to return home and wait at least one year, which she did, but before the allotted time she was perfectly well. A recent examination shows the uterus to be in a normal position.

CASE II.—Aged thirty-nine years; married; one child when seventeen years of age, never pregnant since; labor not instrumental. Complains of backache and constant bearing-down pains; frequent and painful urination.

Very slight laceration of perinæum; atony of vaginal wall. Os in axis of vagina, and bilaterally lacerated. Uterus low down in vagina. The torn lips of the cervix are eroded and everted; bleeds easily; presents almost an epitheliomatous appearance. Copious discharge from interior of uterus and torn cervix. Uterus three and a half inches in depth.

Emmet's trachelorrhaphy. Silver wire for suture. Patient remained in bed four weeks. Subinvolution cleared up as well as other pelvic distress.

CASE III.—Aged thirty-one years; married; four children; never attended by a physician. Constant bearing-down pain, inability to retain urine, and profuse leucorrhœa.

Examination shows a large cystocele and prolapsed uterus and lacerated perinæum. The parts are eroded and excoriated, in consequence of rubbing on her clothing. The cervix is much elongated and hypertrophied and unilaterally lacerated. In this case I did Schröder's operation, which really amounts to the amputation of the cervix. The cystocele was taken care of by denuding the mucous surface, commencing a short distance posterior to the meatus urinarius and extending back almost to the utero-vaginal fold and going wide on each side of the median line, so that when the surface was bared it was elliptical in form. Then by a series of overlapping, buried catgut sutures the parts were gradually rolled in, and finally the mucous edges approximated by interrupted sutures of strong catgut. The perinæum was taken care of two weeks later. Result perfect; complete relief; no return of prolapsus or cystocele at end of two years.

Case IV.—Widow, aged forty-eight years. Has had seven children; all easy labors; no instruments. Severe pain on left side low down and profuse leucorrhœa; says womb falls down and comes out; has dysuria and frequent urination with more or less incontinence.

Examination reveals a large cystocele with uterine procidentia

and laceration of perinæum extending back to the sphincter; also an extensive bilateral laceration of the cervix. Uterus curetted and Emmet's trachelorrhaphy. Anterior colporrhaphy and perineorrhaphy.

This operation was completed at one sitting. Result good; relief perfect.

Case V.—Aged forty-one years; married; three children; never attended by a physician; menstruates every three weeks; headache, backache, and general pelvic uneasiness; unilateral femoral neuralgia; leucorrhœa.

Perinæum lacerated to the sphincter. Cervix enlarged and irregularly lacerated; copious discharge from cervix and interior of uterus. Curettement, large portion of cervix removed and perinæum repaired. Result good; health much improved.

CASE VI.—Aged thirty-three years; married; five children; always attended by a physician; first labor instrumental; no miscarriages. Complains of backache and general pelvic discomfort; leucorrhœa.

Perinæum lacerated, second degree, and rectocele. Very copious discharge from vaginal mucous membrane. Cervix bilaterally lacerated, torn edges, everted and eroded. Uterus retroverted and profuse discharge from its interior.

Curettement; Emmet's trachelorrhaphy; perineorrhaphy. Silkworm gut for suture. Patient did well in all respects.

CASE VII.—Aged twenty-three years; unmarried; one child when eighteen; instrumental. Convalescence protracted. Patient anæmic and general health much impaired. Suffers constantly from headache, backache, and pelvic tenesmus, occasional dysuria, intermittent leucorrhœa, and constipation.

Perinæum lacerated, second degree, with rectocele; atony of vaginal wall. Cervix bilaterally lacerated, with ectropium and cystic degeneration. Endometritis. Uterus sensitive and anteflexed. Divulsion. Curettage and intra-uterine irrigation; Schröder's amputation of the cervix. Very great improvement.

Case VIII.—Aged twenty-six years; married; two children, both instrumental. Protracted convalescence. Thinks she had inflammation of the bowels after second child. Is much run down in general health; has lost considerable flesh; menorrhagia and profuse leucorrhæa.

Perinæum very slightly lacerated and moisture of vagina increased. Stellate laceration of cervix with endometritis. Cervix bleeds easily when touched. Curettement, irrigation, Schröder's operation. Rapid gain in health CASE IX.—Aged forty-three years; married; six children; all labors easy and convalescence rapid; complains of constant pelvic discomfort; is only easy in lying position.

Vaginal outlet much relaxed, uterus low down in vagina, cervix unilaterally lacerated and hypertrophied, copious discharges from interior of uterus, with subinvolution. Thorough dilatation, curetting, and intra-uterine tampon, iodoform gauze. Tampon reinserted every other day for one week, when Schröder's operation was done and perineorrhaphy. The patient did well. Consider in this case that much good resulted from the iodoform-gauze packing.

Case X.—Aged forty-eight years; married; one child at thirty; instrumental delivery; convalescence uneventful; menstruation irregular, flows three to four days; leucorrhœa, backache, constipation, frequent urination, laceration of perinæum first degree; vaginal mucous membrane normal; cervix bilaterally lacerated, with erosion and ectropium; copious secretion; external os in axis of vagina; hard masses in rectum; carunculæ of urethra; bowels thoroughly evacuated, divulsion, curettage, and Emmet's trachelorrhaphy; urethra dilated and carunculæ removed; ten-per-cent. nitrate-of-silver solution applied; improvement very marked.

Case XI.—Aged twenty-eight years; married; one child at twenty-five, attended by a midwife; convalescence slow.

Profuse leucorrhœa and menorrhagia; is decidedly neurasthenic; severe headaches and insomnia.

Relaxed outlet, copious discharge from vaginal mucous membrane, and increased heat; bilateral laceration of cervix, with erosion and endometritis; uterus retroverted; dilatation, curettement, and Emmet's trachelorrhaphy. Very rapid return of health.

Has had a child since operation without recurrence of laceration.

Case XII.—Aged thirty-three years; married; two children, both easy labors. Has had continuous pelvic discomfort since birth of last child; very copious leucorrhœa at times, with backache and pæins extending down the limbs; perinæum lacerated first degree; vaginal mucous membrane healthy; uterus in axis of vagina, but slight descent; stellate laceration of cervix, with cystic degeneration; divulsion, curetting, Schröder's operation; very great relief. Has miscarried at third month since operation.

CASE XIII.—Aged forty-four years; married; seven children; two miscarriages; chronic invalidism; pelvic tenesmus, frequent painful urination, and leucorrhœa.

Vaginal outlet very relaxed, cervix bilaterally lacerated, and glairy mucus escaping from interior of uterus; cystic degeneration of cervix and dense cicatricial thickening in angles of laceration.

Divulsion; curettage; amputation of cervix by double flaps; "Simon's operation," which consists in the removal of wedge-shaped pieces from anterior and posterior lips; denudation of lateral angles, and total removal of all cicatricial tissue. The mucous surfaces after removal of wedge-shaped portions are brought together by means of catgut sutures, and the operation completed in same manner as in Emmet's operation.

Perineorrhaphy; result perfect; patient regained health after several months.

CASE XIV.—Aged forty-one years; married; one child at thirty-four; labor difficult and instrumental; menorrhagia in last four years; leucorrhœa, backache, pain extending down limbs, dysuria, and constipation.

Perinæum lacerated to sphincter; rectocele; cervix unilaterally lacerated and elongated; uterus in axis of vagina but low down; cervical catarrh; curetting; Schröder's operation; perineorrhaphy; result good; improvement fairly satisfactory.

Case XV.—Aged fifty-seven years; married; six children; labor moderately tedious; first two deliveries instrumental; no miscarriages; has been an invalid since menopause at forty-eight.

Perinæum lacerated, second degree; rectocele; cystocele; complete uterine procidentia; unilateral laceration of cervix extending beyond utero-vaginal junction. Simon's operation; anterior colporrhaphy; perineorrhaphy; good result; improvement in health more than satisfactory.

Case XVI.—Aged thirty-nine years; married; five children; never attended by a physician; regular menstruation, not painful; profuse leucorrhœa and backache; vaginitis.

Cervix bilaterally lacerated; endometritis; thickening and tenderness of tubes.

Divulsion; irrigation of uterine cavity (1-to-1,000 bichloride, followed by sterilized water); curettage; Emmet's trachelorrhaphy; slow recovery; pelvic distress, although abating, still occasions much discomfort.

Case XVII.—Aged twenty-seven years; married; three children; no instruments; no miscarriages; regular menstruation; dysmenor-rhœa. Headache, backache, leucorrhœa; general pelvic discomfort; health much impaired.

Perinæum intact; vagina sensitive; bilateral laceration of cervix; endometritis.

Divulsion, curetting, and Emmet's trachelorrhaphy. This patient made a good recovery and is very comfortable.

Case XVIII.—Aged twenty-four years; married; one child; two miscarriages; metrorrhagia; constant bearing-down pain; unable to stand for any length of time; neuralgic pains extending down front of both limbs, backache, leucorrhœa, loss of flesh.

Perinæum lacerated to sphincter; atony of vaginal wall; cervix incompletely bilaterally lacerated; copious muco-purulent discharge from interior of uterus.

Divulsion; curetting; complete discission of mucous surface and thin wall remaining unbroken; Emmet's trachelorrhaphy; perineorrhaphy. Good result. This patient has since borne a child, and no accident further than a rent in the perinæum, which was immediately closed. Health at present good.

CASE XIX.—Aged forty years; married; four children, natural deliveries; one miscarriage. Menstruates every three weeks, and profuse; urination frequent and at times painful; backache; pain in both iliac fossæ, extending down limbs; frequent headache. Perinæum lacerated, first degree; vaginal moisture increased; uterus in axis of vagina; cervix unilaterally lacerated on left side, with erosion and eversion. Uterus sensitive and tubes thickened and tender.

Divulsion; curettage; packing, iodoform gauze; Emmet's operation. Recovery slow.

CASE XX.—Aged thirty-nine years; married; one child, premature at eighth month; in labor many hours; delivery instrumental; convalescence slow; irregular and painful menstruation; anæmic and easily fatigued. Pelvic discomfort, backache, and pain extending through to both iliac fossæ; leucorrhœa. Perinæum intact; vaginal mucous membrane sensitive; heat and moisture increased. Stellate laceration of the cervix; endometritis; uterus anteflexed; no tubal swelling.

Divulsion; curetting; Simon's operation. Result good. Improved in health and continuing to feel better.

CASE XXI.—Aged thirty-eight; married; one child, attended by a midwife; menstruation regular; lasts eight to ten days. Is easily fatigued, anæmic, and has lost considerable flesh; backache, leucorrhœa; outlet relaxed; bilaferal laceration of cervix; endometritis; uterus retroflexed.

Divulsion; curetting; Emmet's trachelorrhaphy. Improved very

decidedly for a time, but returned to hospital after one year, complaining of general weakness, backache, very obstinate constipation, and insomnia.

Hysterorrhaphy was advised on account of the very great retroflexion of the uterus. Patient submitted. Uterus was bound down firmly by adhesions in Douglas's fossa, which were separated and the uterus attached to anterior abdominal wall by buried silk ligatures. Recovery rapid, and so far very great relief.

CASE XXII.—Aged twenty-four years; married; first delivery instrumental. Headache, dizziness, and sick stomach; poor appetite; diarrhœa alternating with constipation. Leucorrhœa profuse; general pelvic discomfort. Frequent urination. Is decidedly neurasthenic. Perinæum lacerated first degree. Bilateral laceration of the cervix, with erosion and eversion. Endometritis.

Divulsion; curetting; Emmet's trachelorrhaphy. Very great improvement while under observation.

CASE XXIII.—Aged thirty-three years; married; four children; first instrumental. Complains when she stands up that womb comes down. Wears a perineal bandage continuously for support.

Uterine procidentia; laceration of perinæum to sphincter; unilateral laceration of cervix.

Anterior colporrhaphy. Double-flap amputation of cervix; perineorrhaphy. No return of prolapse.

CASE XXIV.—Aged twenty-six years; married; one child, tedious labor, but not instrumental; one miscarriage. Menstruates regularly. Sharp pain first day. Backache not relieved when lying down; leucorrhœa; pelvic tenesmus. Pain in right iliac region. Very obstinate constipation; stomach frequently out of order.

Perinæum intact. Vaginal mucous membrane healthy. Unilateral laceration of cervix. Torn edges very much indurated and secreting copiously. Endometritis; uterus sharply anteflexed.

Divulsion; curetting, and intra-uterine packing, sterilized iodoform gauze. The laceration in this case was not very extensive and nothing was done beyond the curetting. Very much improved.

CASE XXV.—Aged thirty-one years; married; one child, easy labor. Regular menstruation. Pain in left side, extending down the limb, with pelvic tenesmus, backache, leucorrhœa. Poor appetite.

Perinæum lacerated, first degree. Vagina healthy. Bilateral laceration of cervix. Endometritis; uterus increased in depth and anteflexed. No tubal trouble.

Divulsion; curetting; Emmet's trachelorrhaphy. Good result. Marked improvement in health.

CASE XXVI.—Aged forty years; married; five children, all easy labors. One miscarriage. Menstruates regularly. Has lost flesh and strength in last two years. Headache; poor appetite; food causes distress and gaseous distention. Pain in back relieved when lying down. Pain in both iliac fossæ, extending down thighs. Leucorrhæa is profuse, occasionally tinged with blood, and of an offensive odor. Pressure of clothing causes discomfort. Bladder irritable. Vaginal heat and sensibility increased. Outlet relaxed. Stellate laceration of cervix. Uterus anteflexed and fixed. Copious secretion from interior of uterus. Salpingitis on both sides.

Divulsion; curettage; irrigation (1-to-2,000 sublimate, followed by sterilized water), and cavity packed with sterilized iodoform gauze.

Health very much improved for a time. Return of former trouble in milder degree.

CASE XXVII.—Aged twenty-four years; married; one child, natural delivery. One miscarriage. Complains of headache, nausea, and frequent attacks of vomiting. Backache much relieved lying down. Pelvic discomfort; leucorrhœa. Constant desire to urinate day and night.

Perinæum lacerated, first degree. Vagina sensitive. Carunculæ around orifice of urethra. Cervix unilaterally lacerated; edges eroded; bleed easily. Uterus anteflexed. Endometritis.

Divulsion; curetting; Emmet's operation. Divulsion of urethra; removal of vegetations. Five-per-cent. nitrate of silver applied every week until disappearance. Complete relief.

CASE XXVIII.—Aged twenty-seven years; married; one child, labor difficult and instrumental. Complains of rectal tenesmus with occasional mucous discharges; backache. Pain in iliac regions, extending down the thighs. Tires easily; occasional leucorrhœa; frequent urination.

Hæmorrhoids. Slight laceration of perinæum. Cervix bilaterally lacerated; uterus in axis of vagina. Edges of cervix eroded, and ectropium. Endometritis.

Divulsion of sphincter ani and ligation of hæmorrhoids. Divulsion and curetting of uterus. Emmet's operation. Rapid and complete recovery.

This woman has since borne a child. Had only three hard pains when the baby was born. Recurrence of cervical laceration on one side.

CASE XXIX.—Aged twenty-nine years; married; four children, labors easy, but always had retention of urine after each confinement, requiring to be catheterized for about one week. Complains of obstinate constipation. Pelvic discomfort. Pain in both iliac regions and loins and leucorrhœa. Laceration of perinæum to sphincter; rectocele and cystocele. Cervix bilaterally lacerated. Endometritis; uterus low down in vagina.

Divulsion; curetting; Emmet's operation; anterior colporrhaphy; perineorrhaphy. Result good. Relief not as satisfactory as was hoped for, on account of continuance of endometritis.

At end of four months dilated the cervix and packed with iodoform gauze. Local treatment continued some weeks. Much improved.

Case XXX.—Aged fifty-three years; married; five children; last delivery transverse presentation. Has not menstruated in three years. Complains of burning and itching of vulva and falling of womb. Wears a cup pessary supported by a belt around the waist and perineal strap. Examination shows outlet very relaxed; incomplete bilateral laceration of cervix; cystocele and uterine procidentia. Discharge from uterus of glairy mucus. Curetting; anterior and posterior colporrhaphy. Health excellent since operation.

CASE XXXI.—Aged twenty-two years; married; one child, instrumental; dates her trouble from birth of the child; severe pain in the back extending down limbs; unable to walk about the house without help; incontinence of urine.

Bilateral laceration of the cervix; subinvolution of the uterus and anteversion; profuse leucorrhœa. Separation of the pubic bones was thought to have taken place during the very difficult extraction of the head, which was large and strongly ossified. The attending physician informs me that she made a very tedious convalescence and was unable to walk for a long time, and absolutely unable to stand on one foot. The uterus was drawn well down and thoroughly dilated. Curettage; Emmet's operation. A large amount of fungoid material was removed. Convalescence rapid and uneventful.

Case XXXII.—Aged twenty-nine years; married; four children, all easy labors; two miscarriages; menstruated three times in last month and very profuse at times. Is anæmic; general health poor, easily fatigued, leucorrhœa, backache, and general pelvic discomfort.

Perinæum intact, vagina sensitive, uterus in axis of vagina and somewhat enlarged; cervix bilaterally lacerated; brownish muco-purulent discharge from interior of the uterus.

Dilatation; curetting; large quantity of fungoid material removed; interior of uterus irrigated with 1-to-2,000 sublimate solution, and cavity packed with sterilized iodoform gauze.

Emmet's trachelorrhaphy done after one week.

Secondary hæmorrhage on third day on account of the catgut which was used for suturing having given way. Packed with iodoform gauze; sutures reapplied at end of two weeks. Good result.

CASE XXXIII.—Aged thirty years; married; three children; first labor very prolonged, but not instrumental; one miscarriage; was confined to bed four weeks, and thinks she had inflammation of the bowels.

Complains of backache, bearing-down pains, and distress in both iliac fossæ, pain extending down limbs; very frequent attacks of headache. Perinæum lacerated, first degree; bilateral laceration of cervix; endometritis, retroversion of uterus, and slight descent.

Divulsion; curettage; Emmet's trachelorrhaphy; very much improved.

CASE XXXIV.—Aged thirty years; two children, easy labors; menses regular. Complains of leucorrhœa, inability to retain urine, and pelvic discomfort.

Relaxed outlet; cystocele, rectocele, bilateral laceration of cervix. Uterus low down in vagina, and glairy mucus escaping from the interior.

Divulsion, curetting, and Emmet's trachelorrhaphy; anterior and posterior colporrhaphy. Result good; relief absolute.

CASE XXXV.—Aged twenty-three years; three children, easy labors; no subsequent trouble; regular menstruation.

Complains of dizziness, weakness, and is easily fatigued. Backache; pain extends down limbs; leucorrhœa and constipation.

Perinæum intact; vaginal heat and sensibility increased; bilateral laceration of cervix with an incomplete laceration of the anterior lip; cystic degeneration of cervix with erosion and eversion of lacerated edges; retroversion.

Divulsion, curetting, and double-flap amputation. Result good; general health much improved, and has become pregnant.

CASE XXXVI.—Aged twenty-nine years; married; one child six years ago, instrumental delivery; convalescence somewhat protracted.

Pelvic discomfort, dysuria, and increased frequency of urination; leucorrhœa; general health and strength failing, and is considerable of a neurasthenic.

Perinæum lacerated, second degree; extensive bilateral laceration of cervix; copious discharge from the interior of the uterus; uterus in normal position.

Divulsion; curettage; Emmet's trachelorrhaphy; posterior colporrhaphy.

Result good, very decided improvement in general health, and continuing to improve.

CASE XXXVII.—Aged twenty-three years; married; two children, natural deliveries. Pain in lumbar region extending down back of left thigh; pelvic pressure; leucorrhœa; frequent urination. Has continued to flow for past six weeks. Is anæmic and unable to attend to her housework; appetite poor; bowels constipated.

Perinæum lacerated, first degree; atony of vaginal walls; unilateral laceration of cervix; erosion and eversion; endometritis.

Divulsion; curettage; Emmet's operation; a large quantity of material which looked like retained placental tissue came away with the curette and irrigator.

Result good; convalescence uneventful.

CASE XXXVIII.—Aged thirty-three years; married; one child; difficult forceps delivery; was in hard labor many hours when a physician was sent for; backache extending down limbs; pain in both sides, low down; leucorrhœa; is comfortable when lying down. Perinæum lacerated, second degree; rectocele; stellate laceration of cervix; endometritis; uterus in axis of vagina; both tubes thickened and tender.

Divulsion; curettage; double-flap amputation of cervix; posterior colporrhaphy. Result good; general condition rapidly improving.

CASE XXXIX.—Aged twenty-seven years; married; two children, both forceps deliveries; no miscarriages; has never had any previous illness.

Pain in both iliac fossæ, extending down the thighs; backache; pelvic tenesmus much increased when standing; leucorrhœa; urination frequent. Menses regular; always has severe pain first day; flow lasts four to five days. Appetite good; bowels regular; suffers from headache during menstruation; perinæum intact; vaginal moisture increased; unilateral laceration of cervix, with erosion and ectropium; endometritis; uterus anteflexed; left tube sensitive and thickened.

Divulsion; curettage; Emmet's trachelorrhaphy. Result good. Improvement in health taking place very slowly.

Case XL.—Aged forty-four years; married; two children, twenty

years between births; easy labors; one miscarriage three years after birth of last child; flowed many weeks after miscarriage; finally had chills and fever and severe pain in lower abdomen, confining her to bed better than one month; uterus curetted; retention of urine; has not menstruated in two years; is anæmic; complains of pelvic tenesmus; severe backache; constipation; frequent urination and pruritus vulvæ; leucorrhœa.

Perinæum lacerated, first degree; vaginitis; bilateral laceration of cervix; endometritis; carunculæ of urethra; torn edges of cervix gape widely and bleed easily; uterus in axis of vagina, and no disease of annexa.

Tamponing vagina with iodoform gauze: for three days (fresh packing each day) prior to operation, and thorough irrigation with plain water. Divulsion; curettage; Emmet's operation.

Divulsion of urethra, removal of vegetations, and five-per-cent. nitrate of silver applied.

Good result. Improvement in health very great.

Case XLI.—Aged twenty-nine years; married; one child; labor prolonged but not instrumental; convalescence protracted; always healthy prior to this time.

Complains of vertigo, severe headache, backache, pelvic discomfort; frequent urination; menstruates every three weeks; lasts one week; profuse, painful at the onset; leucorrhœa.

Perinæum lacerated, second degree; vagina sensitive and moisture increased; slight prolapsus of bladder; uterus retroverted, somewhat fixed; cervix lacerated irregularly and incompletely; admits first joint of index finger readily; tenderness in right iliac fossa and thickening of corresponding tube; endometritis.

Divulsion; curettage; large amount of cervical tissue removed with sharp spoon; unable to bring uterus down to outlet on account of adhesions; cervical canal packed with iodoform gauze; posterior colporrhaphy.

Result good; reflex disturbances have largely disappeared.

CASE XLII.—Aged thirty-six years; married; two children, easy labors; convalescence uneventful; no miscarriages; menses regular; no pain.

Complains of distention of abdomen and colicky pains at times, with occasional vomiting; constipation; backache, pain extending down the thighs; leucorrhœa; vaginal outlet intact; mucous membrane healthy; cervix bilaterally lacerated, with erosion and eversion; uterus retroflexed and sensitive.

Divulsion; curettage; Emmet's trachelorrhaphy.

Result good; uterus replaced and modification of Albert Smith pessary introduced at end of four weeks; fails to relieve sufficiently; is, however, more comfortable.

Have advised her to accept fixation of uterus to anterior abdominal wall if disability continues.

Case XLIII.—Aged thirty-five years; married; two children, easy labors; convalescence delayed; always had retention of urine after delivery; no miscarriages; began menstruating at fourteen, always regular; was confined to bed six weeks on account of peritonitis three years ago.

Headache; backache; pain in right iliac fossa, extending down front of thigh; profuse leucorrhœal discharge; poor appetite; frequent vomiting spells; constipation.

Vaginal outlet slightly relaxed; vaginal mucous surface healthy; bilateral laceration of cervix; torn edges bleed easily; endometritis; uterus retroverted; prolapsus of right ovary; rectal mucous membrane prolapsed and hæmorrhoids.

Divulsion of cervix; curettage; Emmet's operation. Divulsion of sphincter ani; ligation of hæmorrhoids. Good result. Health much improved.

Case XLIV.—Aged thirty-four years; married; one child; difficult forceps delivery.

Complains of constant dragging weight in back and limbs; pelvic discomfort; intermittent leucorrhœa; says she is not able to attend to her ordinary housework.

Perinæum lacerated, second degree; rectocele; bilateral laceration of cervix, with copious discharge from torn edges and interior of the uterus; uterus displaced laterally to the right and fixed; adhesions broken down. Divulsion; curetting; all inflammatory tissue of cervix thoroughly scraped away with the sharp spoon; posterior colporrhaphy; intra-uterine packing, iodoform gauze. Result good. Improvement in health.

CASE XLV.—Aged thirty-eight years; married; five children, labors easy; four miscarriages; prolonged flow after each miscarriage; easily fatigued; poor appetite; loss of flesh and constipation; menstruates about every six weeks; flow continues one week; complains of headache, backache, and general pelvic discomfort; pain referred to left iliac fossa; leucorrhœa; pruritus vulvæ; slight laceration of perinæum; vaginitis; cervix bilaterally lacerated; endometritis; prolapsus of left ovary; uterus anteflexed.

Divulsion; curettage; large quantity of material came away with sharp curette and irrigator. Emmet's operation. Result good. Decided improvement.

CASE XLVI.—Aged thirty years; married; two children, both instrumental; one miscarriage; convalescence slow.

Pain in right side low down; marked pelvic discomfort, with frequency of urination; backache; leucorrhœa; menstruates every three weeks; flows five days; no pain, but pelvic tenesmus increased during the flow; perinæum lacerated, first degree; atony of vaginal walls; uterus low down in vagina; cervix unilaterally lacerated, and endometritis. Divulsion; curettage. Emmet's operation. Posterior colporrhaphy.

Result good; rapid gain in health; pelvic pressure almost absent. Case XLVII.—Aged thirty-five years; married; three children, all easy labors; one miscarriage; flowed about two months; menses regular; no pain; complains of headache; insomnia; backache, extending down the limbs; leucorrhœa; frequent urination; appetite poor; has frequent attacks of vomiting; perinæum intact; cervix bilaterally lacerated, with eversion of the segments; endometritis.

Divulsion; curetting; Emmet's trachelorrhaphy.

Result good. Very much improved.

CASE XLVIII.—Aged thirty-seven years; married; one child; five miscarriages; menses regular.

Complains of profuse leucorrhœa, backache, and pains extending down limbs; loss of flesh; poor appetite and constipation.

Examination: Outlet relaxed; vaginitis; cervix bilaterally lacerated; erosion and ectropium of torn edges; endometritis; tenderness and fullness in right tube and ovary.

Vagina douched with sublimate solution (1 to 1,000) twice each

day for three days, and packed with iodoform gauze.

Divulsion; curetting; Emmet's operation; result good. This patient did not obtain as much relief as was hoped for. Have advised dilatation and intra-uterine packing of iodoform gauze, on account of a continuance of the endometritis.

CASE XLIX.—Aged forty years; married; nine children; no instruments; two miscarriages; menstruates every three weeks profusely; complains of leucorrhœa, backache, and constant pelvic discomfort; is very irritable and melancholy at times; perinæum lacerated to the sphincter; cystocele; bilateral laceration of cervix; endometritis.

Divulsion; curetting; Emmet's operation; anterior colporrhaphy;

perineorrhaphy. Result good. When last heard from, was decidedly neurasthenic, and expressed no special relief from the operation.

CASE L.—Aged thirty-three years; married; three children; first delivery instrumental; no miscarriages; menstruates every four weeks; at times quite painful.

Leucorrhœa; pains in both iliac fossæ; anterior femoral neuralgia; is unable to attend to her work properly, on account of the pelvic discomfort; perinæum lacerated, first degree; vaginal heat and sensibility normal; cervix bilaterally lacerated; endometritis.

Divulsion, curetting, and Emmet's operation. Good result; very satisfactory return of health.

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